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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,120	12/04/2003	Jitendra Mohan	P05746 (NAT115-05746)	7655
23990	7590	09/14/2006	EXAMINER NGUYEN, PHILLIP	
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			PAPER NUMBER	

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/728,120	Applicant(s) MOHAN, JITENDRA	
	Examiner Phillip Nguyen	Art Unit 2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/27/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/27/06 have been fully considered but they are not persuasive.

On page 8, applicant argues that the newly amended claims have overcome the cited reference because the cited reference does not teach in claim 1 “the forward voltage is employed to determine a forward current through the light source”, claim 9 “employing the forward voltage to determine forward current through the light source”, and claim 15 “the forward voltage is employed to determine one or both of a forward current through the light source and a die temperature for the light source”. Examiner disagrees with this argument because these newly amended limitations actually do not limit the claimed invention because they are believed to be inherent features since voltage and current have a direct relationship from the equation $V = IR$. Once voltage is determined, current will be calculated based on the resistance or impedance and the measured voltage.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 and 9-18, are rejected under 35 U.S.C. 102(e) as being anticipated by Althaus et al. (US pat. 6,853,657).

With respect to claims 1, 9, and 15, Althaus discloses a system comprising: a controller (col. 1, line 41) that, when operably coupled to a light source emitting light at a selectively variable output power, determines an output power for emitted light based upon measurements of forward voltage and current across and around the light source, ambient temperature around and across the light source (col. 2, lines 20-50).

With respect to claims 2 and 10, Althaus discloses that the forward voltage is employed to determine a forward current through the light source, and wherein the output power is determined based further upon the forward current (col. 4, lines 38-49).

With respect to claims 3 and 11, Althaus discloses that the forward current is measured, calculated (col. 2, lines 20-34).

With respect to claims 4 and 12, Althaus discloses a forward voltage that is employed to determine the temperature for the Light source, and wherein the output power is determined based further upon the temperature (col. 2 lines 63-67 to col. 3, lines 1, 10-13). Althaus fails to indicate that the Light source is on die. However, since the laser diode is on a die, the limitation is inherently met.

With respect to claims 5 and 13, Althaus discloses wherein the temperature is calculated (see col. 1, line 44). Althaus fails to indicate that the Light source is on die. However, since the laser diode is on a die, the limitation is inherently met.

With respect to claims 6 and 14, Althaus discloses the output power being determined without measurement of emitted Light (see col. 2, lines 41-52).

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With respect to claim 7, Althaus discloses an optical subassembly comprising the light source and adapted for transmission of data over an optical transmission medium (see col. 1, lines 21-28).

With respect to claim 16, Althaus discloses a temperature sensor proximate to the Light source and coupled to the controller, the temperature sensor providing measurements of the ambient temperature for use by the controller (see col. 1, lines 44-55).

With respect to claim 17, Althaus discloses a voltage detector providing measurements of the forward voltage to the controller (see fig. 5).

With respect to claim 18, Althaus discloses a forward voltage that is employed to determine one or both of a forward current through the Light source and the temperature for the Light source, and wherein the output power is determined based further upon one or both of forward current and the temperature (col. 2 lines 63-67 to col. 3, lines 1, 10-13). Althaus fails to indicate that the Light source is on die. However, since the laser diode is on a die, the limitation is inherently met.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 19, and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Althaus et al. (US pat. 6,853,657) in view of Sanchez (US pub. 2005/0249252).

With respect to claim 8, Althaus discloses everything as claimed above without specifically disclosing a processor coupled to the controller and a network connection through the optical subassembly to the optical transmission medium. A processor coupled to the controller and a network connection through the optical subassembly to the optical transmission medium is well taught by Sanchez (see fig. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Althaus's invention with Sanchez to include a processor coupled to the controller and a network connection through the optical subassembly to the optical transmission medium to control the Laser to compensate for performance degradations due to temperature changes and aging without disrupting the transmission of the signal, as indicated by Sanchez (see paragraph 0016).

With respect to claim 19, Althaus discloses everything as claimed above, including a memory (5) communicably couple to the controller (7). Althaus fails to specifically indicating the memory contains one or both of a look-up table for the forward current and a look-up table for the die temperature. Althaus also fails to indicate that the Light source is on die. However, since the Laser diode is on a die, the limitation is inherently met. The memory contains one or both of a look-up table for the forward current and a look-up table for the temperature is well taught by Sanchez (see paragraph 0014). It would have been obvious to one of ordinary skill in the art to modify Sanchez's invention with Sanchez to include a look up table for the temperature to view data, as disclosed by Sanchez (see paragraph 0014).

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With respect to claim 20, Althaus and Sanchez disclose everything as claimed above. In addition, Althaus discloses that the output power is determined without measurement of emitted light (see col. 2, lines 41-52).

Communication Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phillip Nguyen whose telephone number is 571-272-1947. The examiner can normally be reached on 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MINSUN HARVEY, can be reached on 571-272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MINSUN OH HARVEY
PRIMARY EXAMINER